Inventors: Michael Kim and Donald A. Bender

Attorney: Frank T. Carroll Sheet 1 of 12

Phone: (215) 568-3100

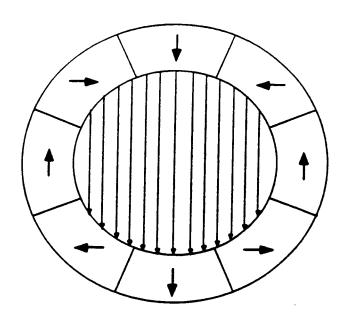


FIGURE 1A: DIPOLE HALBACH ARRAY WITH ARC SEGMENT MAGNETS (PRIOR ART)

Docket No.: AFSI-0151
App No.: not yet assigned
Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL
MOTOR/GENERATOR
Inventors: Michael Kim and Donald A. Bender
Attorney: Frank T. Carroll
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Filed: September 11, 2003

MEGNET HOLDER FOR FLYWHEEL
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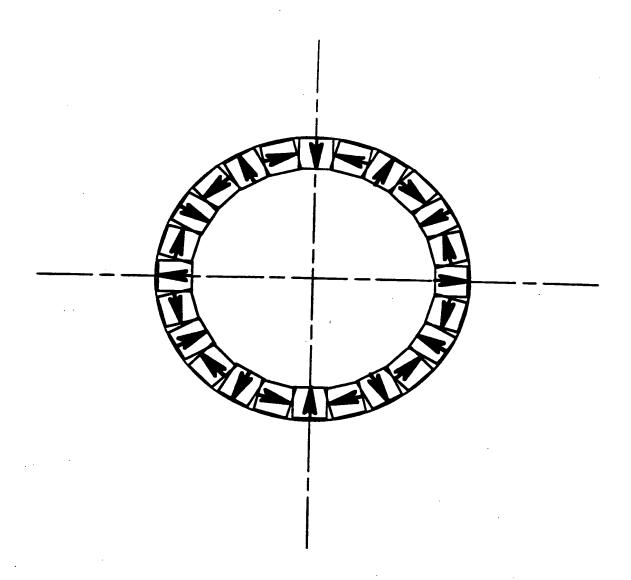


FIGURE 1B: MULTIPLE POLE HALBACH ARRAY WITH SQUARE SEGMENT MAGNETS

Docket No.: AFSI-0151

Docket No.: AFSI-0151
App No.: not yet assigned Filed: September 11, 2003
Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL
MOTOR/GENERATOR
Inventors: Michael Kim and Donald A. Bender
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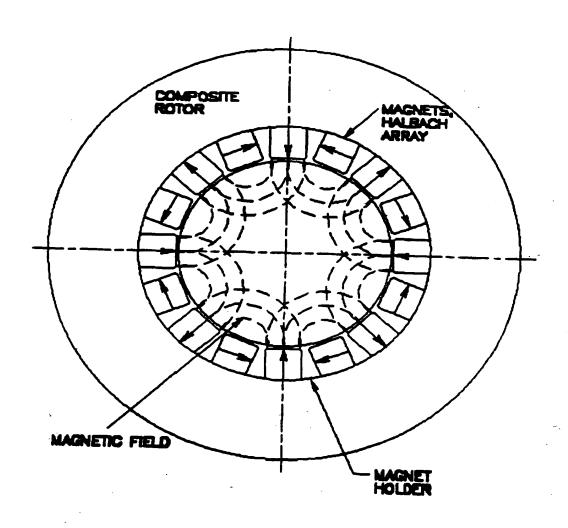


FIGURE 1C: MULTIPLE POLE HALBACH ARRAY WITH SQUARE SEGMENT **MAGNETS**

Docket No.: AFSI-0151

App No.: not yet assigned Filed: September 11, 2003
Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL

MOTOR/GENERATOR

Inventors: Michael Kim and Donald A. Bender Attorney: Frank T. Carroll Sheet 4 of 12

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TRINITY PROPRIETARY INFORMATION

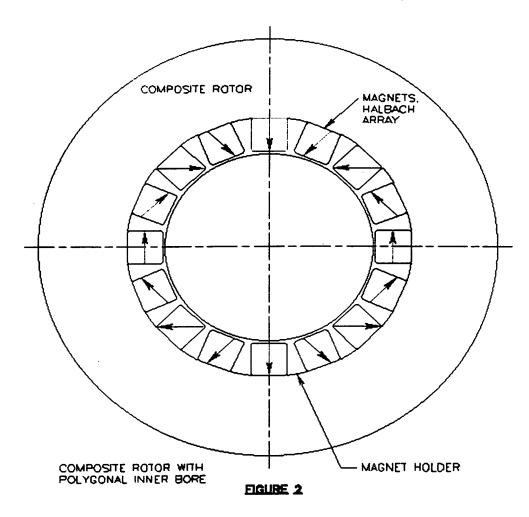


FIGURE 2: SQUARE MAGNETS IN HALBACH ARRAY WITH INTEGRAL MAGNET HOLDER INSIDE A POLYGONAL BORE

Docket No.: AFSI-0151 Docket No.: AFSI-0151
App No.: not yet assigned Filed: September 11, 2003
Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL
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TRINITY PROPRIETARY INFORMATION

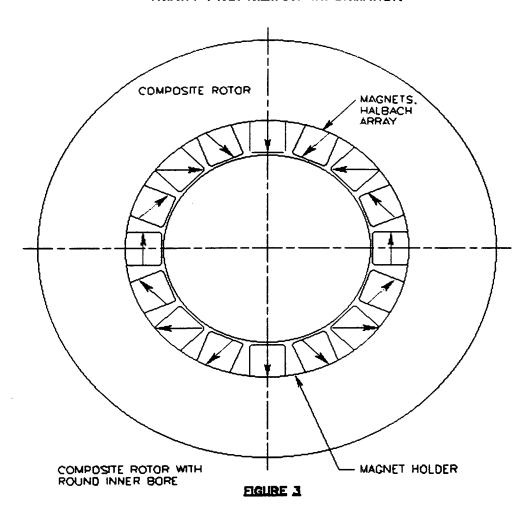


FIGURE 3: SQUARE MAGNETS IN HALBACH ARRAY WITH INTEGRAL MAGNET HOLDER INSIDE A ROUND BORE

Docket No.: AFSI-0151

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Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL MOTOR/GENERATOR
Inventors: Michael Kim and Donald A. Bender Attorney: Frank T. Carroll Phone: (215) 568-3100
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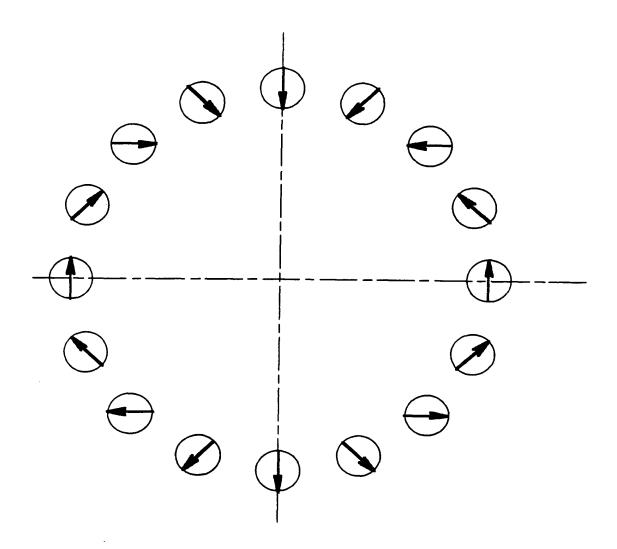


FIGURE 4: DIPOLE HALBACH ARRAY WITH CYLINDRICAL MAGNET SEGMENTS

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Inventors: Michael Kim and Donald A. Bender
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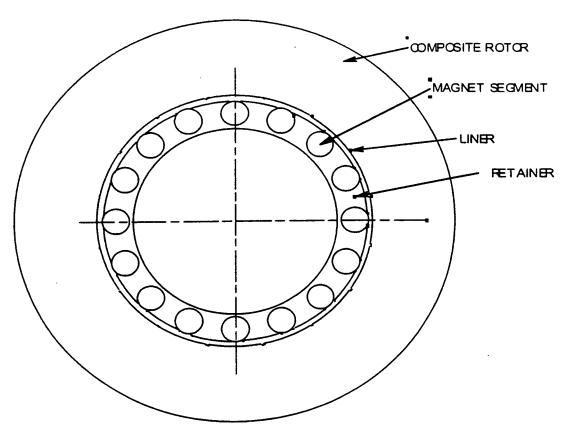


FIGURE 5: THIN LINER AND RETAINER

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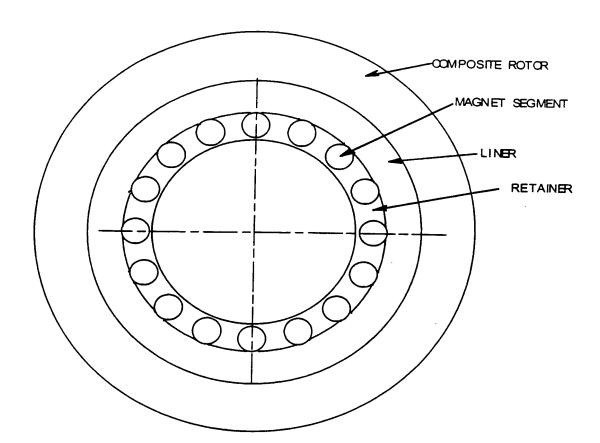


FIGURE 6: THICK LINER, SEPRATE RETAINER

Docket No.: AFSI-0151
App No.: not yet assigned Filed: September 11, 2003
Title: PERMANENT MAGNET ARRAY AND MEGNET HOLDER FOR FLYWHEEL MOTOR/GENERATOR
Inventors: Michael Kim and Donald A. Bender Attorney: Frank T. Carroll Phone: (215) 568-3100
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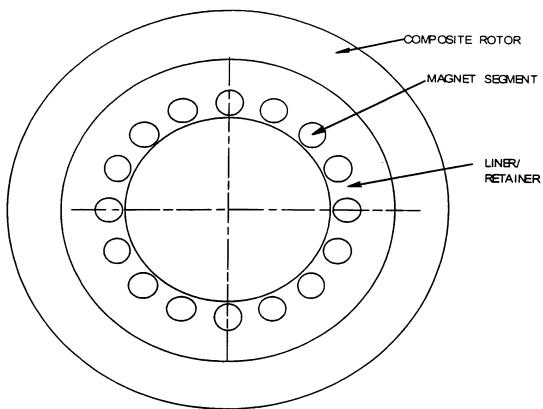


FIGURE 7: COMBINED LINER RETAINER

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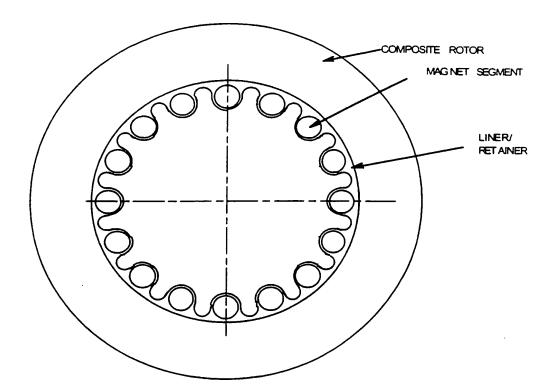


FIGURE 8: CONTOURED LINER/RETAINER

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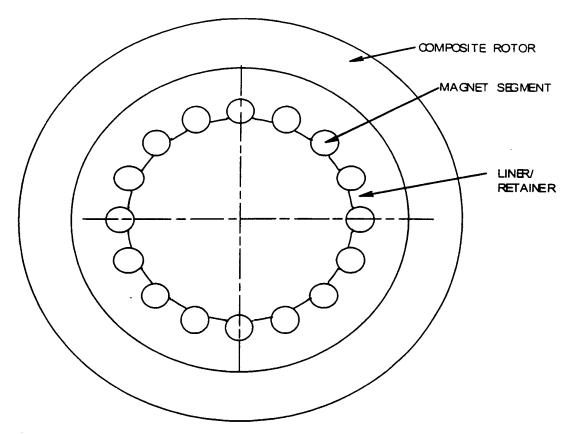


FIGURE 9: PARTIALLY SURROUNDING LINER/RETAINER

MOTOR/GENERATOR

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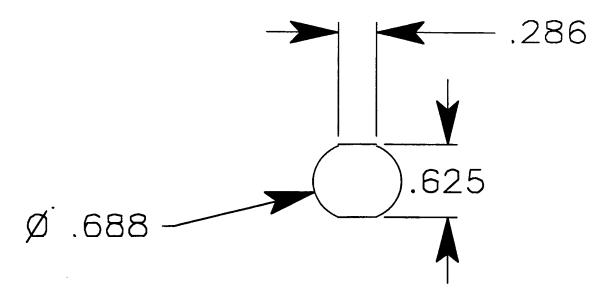


FIGURE 10: MAGNET SEGMENT WITH ANTIROTATION FLATS

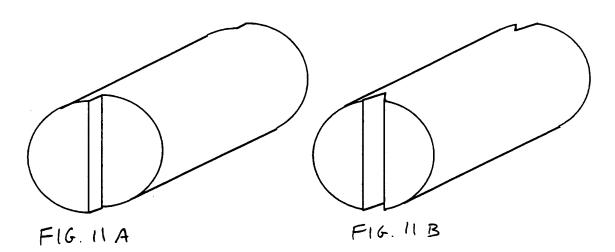


FIGURE 11: ANTIROTATION FEATURES ON ENDS OF MAGNET (STEP OR GROOVE)